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APPLICATION NO. FILING DATE		LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/541,208	11/21/2005		Pepijn Martens	13438/2	7660		
23838	7590	09/21/2006		EXAM	EXAMINER		
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SUITE 700			ART UNIT	PAPER NUMBER			
WASHINGTO	ON, DC	20005	2854				

DATE MAILED: 09/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<del> </del>			ication No.	Applicant(s)	Applicant(s)				
Office Action Summary			41,208	MARTENS ET AL	MARTENS ET AL.				
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Period fo	The MAILING DATE of this communi or Reply	ication appears o	n the cover sheet w	vith the correspondence ac	ddress				
WHIC - Exter after - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOR CHEVER IS LONGER, FROM THE M. Insions of time may be available under the provisions. SIX (6) MONTHS from the mailing date of this common period for reply is specified above, the maximum state to reply within the set or extended period for reply eply received by the Office later than three months at an advantage of the provided patent term adjustment. See 37 CFR 1.704(b).	AILING DATE O of 37 CFR 1.136(a). In unication. tutory period will apply will, by statute, cause th	F THIS COMMUN no event, however, may a and will expire SIX (6) MO ne application to become a	IICATION. A reply be timely filed  DNTHS from the mailing date of this of ABANDONED (35 U.S.C. § 133).					
Status									
1)⊠	Responsive to communication(s) file	d on <i>05 July 200</i>	<b>95</b> .						
		2b)⊠ This action							
3)	,—								
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.								
Dispositi	on of Claims								
4)⊠	4)⊠ Claim(s) <u>1-20</u> is/are pending in the application.								
	4a) Of the above claim(s) is/are withdrawn from consideration.								
5)	Claim(s) is/are allowed.								
-	Claim(s) <u>1-20</u> is/are rejected.								
·	•								
8)	Claim(s) are subject to restric	tion and/or electi	on requirement.						
Applicati	on Papers								
9) 🗌	The specification is objected to by the	e Examiner.							
10)⊠	The drawing(s) filed on <u>05 July 2005</u>	•		•					
	Applicant may not request that any object	•	•	, ,					
44	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.									
Priority u	ınder 35 U.S.C. § 119								
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:									
	<ul> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> </ul>								
	3. Copies of the certified copies of the priority documents have been received in this National Stage								
application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.									
	the attached detailed Office action	inor a list of the	ocitined copies no	t received.					
Attachmen	t(s)								
1) Notic	e of References Cited (PTO-892)			Summary (PTO-413)	•				
	e of Draftsperson's Patent Drawing Review (Pination Disclosure Statement(s) (PTO/SB/08)	TO-948)		o(s)/Mail Date Informal Patent Application					
	r No(s)/Mail Date <u>20050705</u> .	6)  Other: _							

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**DETAILED ACTION** 

Specification

1. The disclosure is objected to because of the following informalities: the specification

lacks the proper section headings, and does not appear to be in the proper form for a US

application.

Appropriate correction is required.

Information Disclosure Statement

2. The listing of references in the specification is not a proper information disclosure

statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information

submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be

incorporated into the specification but must be submitted in a separate paper." Therefore, unless

the references have been cited by the examiner on form PTO-892, they have not been

considered.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly

claiming the subject matter which the applicant regards as his invention.

4. Claims 2 and 15-18 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

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applicant regards as the invention.

a. Regarding claim 2, it is not clear how the distal portion could cover *only* the proximal phalanx of the index finger while also covering the middle phalanx of the index finger. To

expedite prosecution, the examiner will interpret the claim as if "only" were not included.

Appropriate correction or clarification is required.

## Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 7. Claims 1, 2, 5, 6, 11, 13, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang, US 5,779,113 (hereafter Huang) in view of Doynov, US 2002/0163495 A1 (hereafter Doynov).

### a. Regarding claim 1:

Huang teaches a watch assembly comprising a case housing the watch mechanism (10, Fig. 2) and the display screen, actuator means for actuating the mechanism external to the case and connected to the mechanism by connection means (watch must inherently have some actuator means for controlling the watch, i.e. by adjusting the display to show the proper time), and a wristlet supporting the actuator means, the connection means, and the case, the case being placed on the back of the hand, the assembly being characterized in that the wristlet comprises a flexible piece comprising: a) a proximal portion (20 Fig. 2) for surrounding the wrist; b) a distal portion (20, Fig. 2) for surrounding at least the first phalanx at the base of the index finger; and c) an intermediate portion (12, Fig. 2) for extending over the back of the hand between said proximal and distal portions and supporting the case.

Huang does not teach that at least one actuator means is mounted laterally on the distal portion of the wristlet so as to be actuatable by the thumb of the same hand.

Doynov teaches a multi-functional ergonomic interface for operating electronic equipment (¶ 2), including a wristlet (10, Fig. 1) supporting the actuator means, and the connection means, the connection means placed on the back of the hand, the assembly being characterized in that the wristlet comprises a flexible piece comprising: a) a proximal portion (13, Fig. 1) for surrounding the wrist; b) a distal portion (11, Fig. 1) for surrounding at least the first phalanx at the base of the index finger; and c) an intermediate portion for extending over the back of the hand between said proximal and distal portions that includes at least one actuator means (12, Fig. 1) and is mounted laterally on the distal portion of the wristlet so as to be

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actuatable by the thumb of the same hand. This allows for control of an electronic device by one hand in a simple and ergonomic design (¶ 14).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Huang to include at least one actuator means mounted laterally on the distal portion of the wristlet so as to be actuatable by the thumb of the same hand, because Doynov teaches that this would allow the user to operate the watch with only one hand, while providing a simple and ergonomic design.

- b. Regarding claim 2, the combination of Huang and Doynov teaches all that is claimed as discussed in the rejection of claim 1 above. Doynov, as combined with Huang, also teaches wherein the distal portion of the wristlet (11, Fig. 1) is configured to surround only the proximal phalanx and possibly also the middle phalanx of the index finger (see Fig. 2, which shows item 11 on the hand).
- c. Regarding claims 5 and 17, the combination of Huang and Doynov teaches all that is claimed as discussed in the rejection of claims 1 and 2 above. Huang, as combined with Doynov, also teaches wherein the actuator means and the connection means are flexible (Fig. 2 shows item 10 flexing with the hand and finger).
- d. Regarding claims 6 and 18, the combination of Huang and Doynov teaches all that is claimed as discussed in the rejection of claims 1 and 2 above. Doynov, as combined with Huang, also teaches wherein the flexible piece in which the wristlet is made comprises a layer of flexible material, in particular elastomer material, having the connection means and the actuator means integrated therein (Fig. 2 shows that 11 must be flexible, as it is worn on the user's finger, and

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the user's finger must be able to bend to properly type on the keyboard).

e. Regarding claim 11:

The combination of Huang and Doynov teaches all that is claimed as discussed in the rejection of claim 1 above. Huang also teaches wherein the case has a shape with its major axis extending in the longitudinal direction of the hand, the two opposite sides of the intermediate portion closely tracking the shape configuration. (see Fig. 2).

The combination of Huang and Doynov does not teach a case with an oval shape.

It has been held that mere changes in shape are not sufficient to patentably distinguish an invention over the prior art. See MPEP § 2144.04(IV)(B).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Huang so that the shape of the case was an oval, because a person having ordinary skill in the art would know that an oval is an acceptable equivalent shape to other shapes, and one that would provide a suitable watch that would allow time information to be presented to the user.

- f. Regarding claim 13, the combination of Huang and Doynov teaches all that is claimed as discussed in the rejection of claim 1 above. Doynov, as combined with Huang, also teaches wherein the distal portion of the wristlet is designed to surround the proximal phalanx and the middle phalanx and includes a transverse cutout situated in register with the joint between the proximal and middle phalanges of the index finger (see cutout in item 11 in Fig. 1, and item 11 on finger in Fig. 2).
- 8. Claims 3, 4, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over

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Huang in view of Doynov as applied to claims 1 and 2 above, and further in view of Yuzuki, US

6,324,124 B1 (hereafter Yuzuki).

a. Regarding claims 3 and 15:

The combination of Huang and Doynov teaches all that is claimed as discussed in the

rejection of claims 1 and 2 above. Doynov, as combined with Huang, also teaches wherein two

distinct actuator elements are mounted laterally and longitudinally on the distal portion of the

wristlet (see Fig. 1).

The combination of Huang and Doynov does not teach wherein the actuators are

specifically for actuating an ON/OFF control, and an element for actuating an intermediate time

control.

Yuzuki teaches a electronic timepiece with a plurality of functions, including an alarm, a

chronograph, and a timer, including an ON/OFF switch and a switch for actuating an

intermediate time control (col. 7, ll. 46-51).

It would have been obvious to a person having ordinary skill in the art at the time the

invention was made to further modify Huang by replacing the simple watch disclosed by Huang

with the advanced, multifunction watch of Yuzuki, including actuators specifically for actuating

an ON/OFF control, and an element for actuating an intermediate time control, because a person

having ordinary skill in the art would have been motivated to provide a functional, feature-

packed watch to increase the utility of the watch device to the user.

b. Regarding claims 4 and 16:

The combination of Huang and Doynov teaches all that is claimed as discussed in the

rejection of claims 1 and 2 above. Doynov, as combined with Huang, also teaches wherein two distinct actuator elements are mounted laterally and longitudinally on the distal portion of the wristlet (see Fig. 1).

The combination of Huang and Doynov does not teach wherein the actuators are specifically for actuating an ON/OFF control, and an element for actuating an intermediate time control, or a first element disposed on the side of the index finger, and a second element disposed beside the first element, e.g. on the back of the index finger.

It has been held that mere rearrangement of parts is not sufficient to patentably distinguish an invention over the prior art. See MPEP § 2144.04(VI)(C).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to further modify Huang wherein a first element is disposed on the side of the index finger, and a second element is disposed beside the first element, e.g. on the back of the index finger, because a person having ordinary skill in the art would have been motivated by the nature of the problem to be solved, i.e. the optimal ergonomic arrangement for easy operation by one hand, to rearrange the actuators to find their optimal placement.

Yuzuki teaches a electronic timepiece with a plurality of functions, including an alarm, a chronograph, and a timer, including an ON/OFF switch and a switch for actuating an intermediate time control (col. 7, ll. 46-51).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to further modify Huang by replacing the simple watch disclosed by Huang with the advanced, multifunction watch of Yuzuki, including actuators specifically for actuating

an ON/OFF control, and an element for actuating an intermediate time control, because a person having ordinary skill in the art would have been motivated to provide a functional, feature-packed watch to increase the utility of the watch device to the user.

- 9. Claims 7, 8, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang in view of Doynov as applied to claims 5 and 6 above, and further in view of Yaniger, US 5,302,936 (hereafter Yaniger).
- a. Regarding claims 7 and 19:

The combination of Huang and Doynov teaches all that is claimed as discussed in the rejection of claim 6 above.

The combination of Huang and Doynov does not teach wherein the actuator means are constituted by a powder which is locally mixed in the layer of flexible material and which presents electrical resistance that varies as a function of the pressure that is exerted thereon.

Yaniger teaches a conductive particulate force transducer that uses a powder (16, Fig. 1) which is locally mixed in the layer of flexible material ("flexible," col. 2, 1. 34) and which presents electrical resistance that varies as a function of the pressure that is exerted thereon (col. 2, 1l. 29-33). Such a transducer has stable, predictable performance characteristics independent of manufacturing conditions, and a small cost of manufacture (col. 1, 1l. 51-57).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to further modify Huang wherein the actuator means are constituted by a powder which is locally mixed in the layer of flexible material and which presents electrical resistance that varies as a function of the pressure that is exerted thereon, because Yaniger

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teaches that this type of actuator has stable, predictable performance characteristics independent

of manufacturing conditions, and a small cost of manufacture.

b. Regarding claims 8 and 20:

The combination of Huang and Doynov teaches all that is claimed as discussed in the

rejection of claims 5 and 6 above.

The combination of Huang and Doynov does not teach wherein the actuator elements are

formed by silkscreen printing.

Yaniger teaches a conductive particulate force transducer that uses a powder, wherein the

actuator elements are formed by silkscreen printing (col. 1, 1, 65). Such a transducer has stable,

predictable performance characteristics independent of manufacturing conditions, and a small

cost of manufacture (col. 1, ll. 51-57).

It would have been obvious to a person having ordinary skill in the art at the time the

invention was made to further modify Huang wherein the actuator elements are formed by

silkscreen printing, because Yaniger teaches that this type of actuator has stable, predictable

performance characteristics independent of manufacturing conditions, and a small cost of

manufacture.

10. Claims 9, 10, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Huang in view of Doynov as applied to claims 1, 5, and 6 above, and further in view of Yang,

US 6,991,364 B2 (hereafter Yang).

a. Regarding claim 9:

The combination of Huang and Doynov teaches all that is claimed as discussed in the

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rejection of claim 6 above.

The combination of Huang and Doynov does not teach wherein the connection means are metal threads, wires, or tracks embedded in the layer of flexible material.

Yang teaches a same-hand control device of a multi-function watch (col. 1, 1. 6), wherein connection means between actuators and the watch are metal threads, wires, or tracks embedded in the layer of flexible material (see wires, Fig. 9). Such wires allow a device to be controlled by the hand of a user that is associated with the same limb to which the device is secured (col. 1, 1l. 40-42).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Huang wherein the connection means are metal threads, wires, or tracks embedded in the layer of flexible material, because Yang teaches that wires allow a device to be controlled by the hand of a user that is associated with the same limb to which the device is secured.

#### b. Regarding claim 10:

The combination of Huang and Doynov teaches all that is claimed as discussed in the rejection of claim 5 above.

The combination of Huang and Doynov does not teach wherein the connection means are metal textile threads, hidden at least in part in an element for finishing the side of the wristlet.

Yang teaches a same-hand control device of a multi-function watch (col. 1, 1. 6), wherein the connection means are metal textile threads, hidden at least in part in an element for finishing the side of the wristlet (see wires, Fig. 9). Such wires allow a device to be controlled by the hand

of a user that is associated with the same limb to which the device is secured (col. 1, 11, 40-42).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Huang wherein the connection means are metal textile threads, hidden at least in part in an element for finishing the side of the wristlet, because Yang teaches that wires allow a device to be controlled by the hand of a user that is associated with the same limb to which the device is secured.

# c. Regarding claim 14:

The combination of Huang and Doynov teaches all that is claimed as discussed in the rejection of claim 1 above.

The combination of Huang and Doynov does not teach wherein at least one actuator element is disposed on the intermediate portion or the proximal portion of the wristlet, at a distance from the case.

It has been held that mere rearrangement of parts is not sufficient to patentably distinguish an invention over the prior art. See MPEP § 2144.04(VI)(C).

Yang teaches a same-hand control device of a multi-function watch (col. 1, 1. 6), with actuators provided in a variety of places (compare Figs. 7, 9 and 11). Such actuators allow a device to be controlled by the hand of a user that is associated with the same limb to which the device is secured (col. 1, 11. 40-42).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to further modify Huang at least one actuator element is disposed on the intermediate portion or the proximal portion of the wristlet, at a distance from the case, because

Yang teaches that a variety of actuator positions are possible, because a person having ordinary skill in the art would have been motivated by the nature of the problem to be solved, i.e. the optimal ergonomic arrangement for easy operation, to rearrange the actuators to find their

optimal placement.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Huang in view of Doynov as applied to claim 1 above, and further in view of Olsson, US 4,244,044 (hereafter

Olsson).

The combination of Huang and Doynov teaches all that is claimed as discussed in the rejection of claim 1 above.

The combination of Huang and Doynov does not teach wherein the wristlet includes an opening in the intermediate portion giving access to the back face of the case.

Olsson teaches a watch with a removable back plate, which is necessary for battery replacement and service access (col. 1, 11, 30-33).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Huang wherein the wristlet includes an opening in the intermediate portion giving access to the back face of the case, because Olsson teaches that modern watches require accessibility from the back for battery replacement and servicing, and an opening in the wristlet would facilitate such access.

### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Leo T. Hinze whose telephone number is (571) 272-2167. The

examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Judy Nguyen can be reached on (571) 272-2258. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

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information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Leo T. Hinze Patent Examiner AU 2854 07 September 2006

JUDY NGUYEN
SUPERVISORY PATENT EXAMINER

zu dy Maugen